P10, R12-57

From: Caterina Desiato [mailto:cdesiato@hawaii.edu]
Sent: Tuesday, April 24, 2012 12:49 AM
Subject: Council Meeting Testimony

Dear Council Members,

I would like to submit testimony to support Resolution 12-57.

It is well known in the scientific community of genetics that genetic modifications entail unintended and unpredictable mutations that emerge only in the long run. After introducing several studies that offer evidence of specific GMOs harmful effects, both in the short and the long term, I will address validity issues, also known among the scientific community, about the studies that support the hypothesis that GMOs are not harmful. In this light, labeling will finally appear as the least that can be done to offer citizens the choice to buy mass produced foods that, according to scientific principles, should be confined to scientific laboratories and controlled experiments.

In 2005, a study by Irina Ermakova reports that more than half the babies from mother rats fed GM soy died within three weeks, GM soy fed rats were found also significant slow growth and infertility.
http://www.huffingtonpost.com/jeffrey-smith/genetically-modified-soy_b_544575.html

Similar results have been found in an Austrian *government* study published in November 2008.
A death rate 5 times higher then the control groups was found also in Alexey Surov (2010) study. He gave Monsanto GM soy to hamsters, and results show also slower growth and infertility (N=140).
The American Academy of Environmental Medicine (AAEM) reported that "Several animal studies indicate serious health risks associated with GM food," including infertility, immune problems, allergies, accelerated aging, faulty insulin regulation, and changes in major organs. The AAEM asked physicians to advise patients to avoid GM foods.
http://www.responsibletechnology.org/

Genetically engineered Bovine Growth Hormone (Monsanto's Posilac) is in US cows in spite of the fact that two meta-analysis found that animals encountered 25% increase in the risk of clinical mastitis, a 40% reduction in fertility and 55% increased risk of developing clinical signs of lameness (mobility issues). All this for around 10% increased milk production.
A European Union scientific commission found similar results.
In humans, the same hormone levels, is associated with breast cancer in a 20-year epidemiological study begun in 1976 and published in 1997.
The United States is the only developed nation to permit milk from cows given artificial growth hormone to be given to humans. Posilac was banned from use in Canada, Australia, New Zealand, Japan and all European Union countries.

Based on the work of Barbara McClintock, who received the Nobel Prize for her findings in genetics in 1983, we know that genetic modifications entails unintended and unpredictable mutations that emerge only in the long run. Of particular concern are the observed mutation from proto-oncogenes to oncogenes which support cancer. These mutations increase and become clear only after several generations, therefore unintended effects emerge only in the long run and increase exponentially over time. Unintended effects are not only at the level of the health of the modified organisms but also at the eco-system level, in terms of biodiversity and health of the environment where this organisms are introduced, as extensively reported by the Food and Agriculture Organization of the United Nations. This means that we need scientists to fully exercise the Precautionary Principle and that GMOs are not really tested before decades of longitudinal studies. Therefore, we are literally testing these products on humans without their inform consent. Precautionary Principle is normal science, and it is being neglected in the very field where extremely well supported scientific findings strongly recommend it.

Instead, most studies that found no risk for health in GMO foods are short-term studies, moreover they have been conducted by biotechnology companies commercializing the Genetically Modified plants themselves.
This is not said by anti-GMO activists, but by biotechnologists [Domingo and Bordonaba] in a 2011 "literature review on the safety assessment of genetically modified plants"

José L. Domingo and Jordi Giné Bordonaba, Environment International, Volume 37, Issue 4, May 2011, Pages 734-742 (2011)

Beside the conflict of interest and the desertion of the precautionary principle, the public has also strong historical reasons to be concerned by the the work of companies like Monsanto.

Monsanto, which produce most of the world GMOs, has a history of concealing health risks of its products, falsifying studies, and utilizing deceiving advertisement. E.g. Monsanto produced Agent Orange (still causing malformations in newborns TODAY since the US war in Vietnam) while it covered-up dioxin contamination in products and falsified dioxin health studies.
Monsanto bought Searle and its Aspartame in 1985. Aspartame which was banned by FDA in 1980 as it might induce brain tumor. But Aspartame somehow became legal again. In 1981 Searle re-applied to the new FDA commissioner, Arthur Hayes Hull, Jr., who appointed a new 5-person Scientific Commission. The panel was upholding the ban by a 3-2 decision. Hull then installed a sixth member on the commission, and the vote became deadlocked. He then personally broke the tie in aspartame's favor. Hull later left the FDA under allegations of impropriety. Since that time he has never spoken publicly about aspartame.
http://www.rense.com/general33/legal.htm

As the Washington Post reported: for nearly 40 years, while producing the now-banned industrial coolants known as PCBs at a local factory, Monsanto Co. routinely discharged toxic waste into a west Anniston creek and dumped millions of pounds of PCBs into oozing open-pit landfills.

Monsanto was found guilty this October, by France's highest court of false advertising, for claims that Roundup, its toxic herbicide, is biodegradable and leaves "the soil clean." Monsanto has a long history of fraudulent statements. It has advertised and sold GMO cotton seeds in central India although the economic and agricultural conditions where incompatible with them. Farmers indeed had to re-buy the seeds every year because they are engineered to produce 2nd generation sterile seeds, they were required to buy Monsanto pesticides and fertilizers as the plant are engineered to work with them, moreover, they didn't have the type of irrigation systems required by the engineered plant to grow. Farmers couldn't face all these increasing expenses and 200.000 farmers committed suicide, some with the same pesticide they couldn't afford anymore.

As from the Huffington Post - April 20, 2010 - Scientists who discover adverse findings from GMOs are regularly attacked, ridiculed, denied funding, and even fired. When Ermakova reported the high infant mortality among GM soy fed offspring, for example, she was attacked and vilified. Samples were stolen from her lab, papers were burnt on her desk, and she said that her boss, under pressure from his boss, told her to stop doing any more GMO research. No one has yet repeated Ermakova's studies although they are simple and inexpensive.

Hungary and Peru are among the Nations banning GMO crops. France just launched new restrictions regarding the use of Monsanto's maize on French soil.
http://naturalsociety.com/gmo-crops-continually-banned-around-world-health-freedom/

Labeling legislations for bovine growth hormone introduced in Kansas and Pennsylvania. Resolution to introduce GMO passed in Kauai, Maui and Big Island.

Labeling GMOs is the least that can be done to give a chance to the public to choose whether to be testers of products that are scientifically proven to be impossible to assess in the short-run, both in term of human health and environmental effects.

Thank you in advance for your consideration,

Caterina Desiato
Teaching Assistant
Communication and Information Sciences
University of Hawai'i at Manoa
cdesiato@hawaii.edu
Ph. n. 8083581320